



SAW Components

SAW RF filter

Short range devices

Series/type:	B3588
Ordering code:	B39921B3588U410
Date:	August 21, 2008
Version:	2.3



SAW Components

B3588

SAW RF filter

915.00 MHz

Data sheet



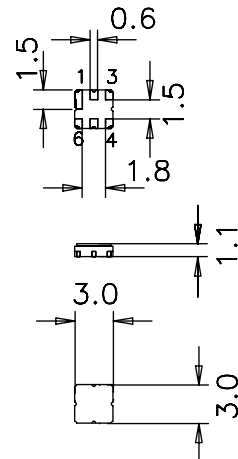
Application

- Low-loss RF filter for remote control receivers
- No matching network required for operation at 50 Ω



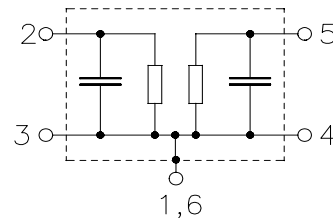
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- Lead free soldering compatible with J - STD20C
- AEC-Q200 qualified component family
- **Electrostatic Sensitive Device (ESD)**



Pin configuration

- 2 Input
- 5 Output
- 1,3,4,6 Ground





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Characteristics

Temperature range for specification: $T = 0\text{ °C to }+70\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	915.00	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2.9	3.3	dB
902.00 ... 928.00 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.9	1.5	dB
902.00 ... 928.00 MHz					
Attenuation (relative to $\alpha_{\max}$)	α_{rel}				
10.00 ... 800.00 MHz		50	55	—	dB
800.00 ... 845.00 MHz		45	50	—	dB
845.00 ... 880.00 MHz		35	43	—	dB
947.00 ... 992.00 MHz		15	22	—	dB
992.00 ... 1020.00 MHz		35	45	—	dB
1020.00 ... 1200.00 MHz		45	50	—	dB
Temperature coefficient of frequency	TC_f	—	−30	—	ppm/K



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Characteristics

Temperature range for specification:	$T = -40\text{ °C to }+85\text{ °C}$
Terminating source impedance:	$Z_S = 50\ \Omega$
Terminating load impedance:	$Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	915.00	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2.9	3.5	dB
902.00 ... 928.00 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.9	1.8	dB
902.00 ... 928.00 MHz					
Attenuation (relative to $\alpha_{\max}$)	α_{rel}				
10.00 ... 800.00 MHz		50	55	—	dB
800.00 ... 845.00 MHz		45	50	—	dB
845.00 ... 880.00 MHz		33	43	—	dB
947.00 ... 992.00 MHz		13	22	—	dB
992.00 ... 1020.00 MHz		35	45	—	dB
1020.00 ... 1200.00 MHz		45	50	—	dB
Temperature coefficient of frequency	TC_f	—	−30	—	ppm/K

Maximum ratings

Operable temperature range	T	−45/+125	°C	
Storage temperature range	T_{stg}	−45/+125	°C	
DC voltage	V_{DC}	5	V	
Source power	P_S	15	dBm	source impedance 50 Ω
Source power	P_S	18	dBm	duty cycle 1:10,
902 MHz to 928 MHz				−40 °C to +85 °C

Please read *cautions and warnings and important notes* at the end of this document.



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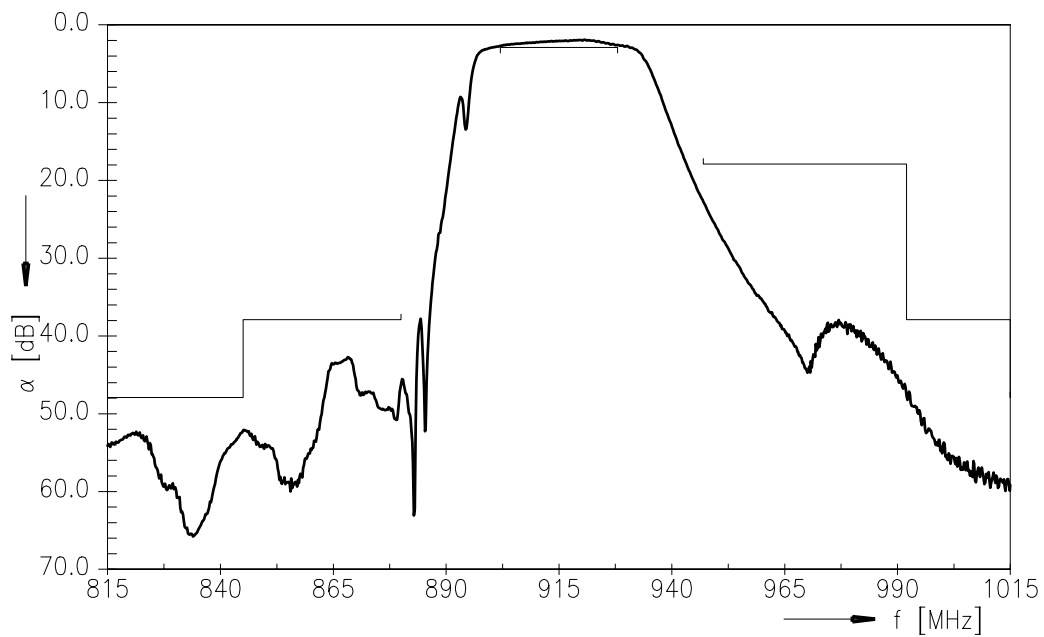
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915.00 MHz

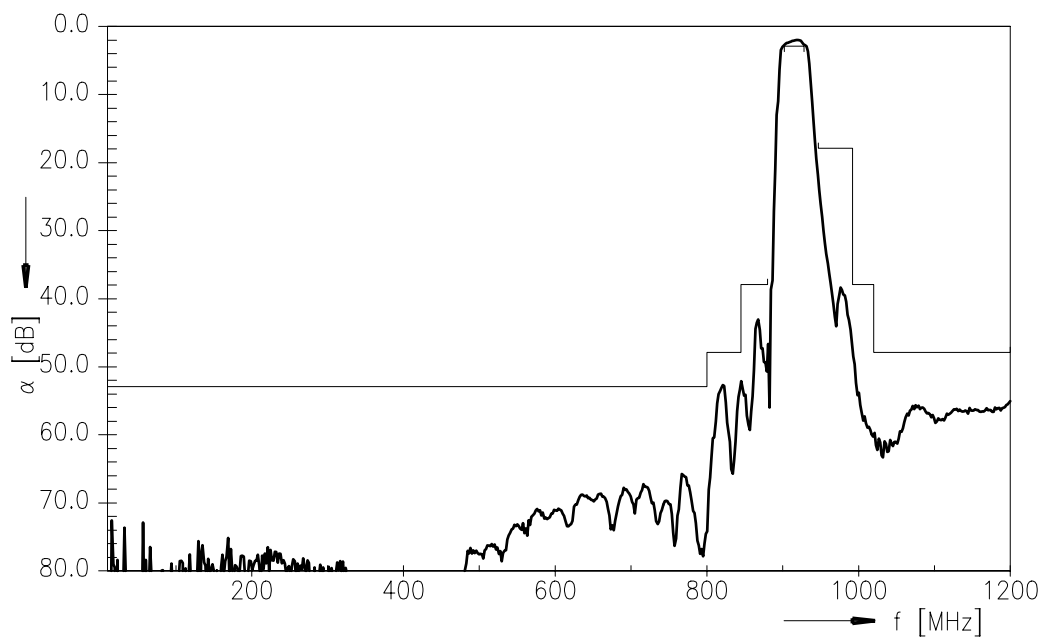
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Transfer function



Transfer function (wideband)



Please read *cautions and warnings* and *important notes* at the end of this document.

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Data sheet

**References**

Type	B3588
Ordering code	B39921B3588U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B3588_NB.s2p B3588_WB.s2p
Soldering profile	S_6001
RoHS compatible	defined as compatible with the following documents: "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment."

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com.

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